

PATENT  
Attorney Docket No.: SALK2940  
(088802-8051)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Schiffer & Heinemann

Application No.: 09/854,140

Filing Date: May 11, 2001

For: KAINATE RECEPTOR SUBUNIT GLUR7  
POLYMORPHISMS FOR DIAGNOSING  
PREDISPOSITION AND FOR THERAPY  
OF MOOD DISORDERS

Group Art Unit: 1632

Examiner: Wilson, Michael C.

**CERTIFICATION OF FACSIMILE TRANSMISSION**  
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9/3/02

Date

Commissioner for Patents  
Washington, D.C. 20231

**RESPONSE**

Sir:

Responsive to the Office Action mailed August 5, 2002 (Paper No. 8), please consider the following remarks.

**REMARKS**

The present invention relates to methods of determining predisposition of a subject to a mood disorder. Invention methods involve determining the presence of specific kainate receptor subunit GluR7 allelic genotypes or allelic phenotypes. Accordingly, invention methods facilitate diagnosis of predisposition to mood disorder and treatment thereafter. Also provided are kits useful for carrying out invention methods, and methods for identification of compounds useful for treatment of subjects predisposed to mood disorders.

Claims 1-36 are currently pending. For the Examiner's convenience, a clean copy of the complete set of all pending claims for this application is provided in APPENDIX A.

The restriction of claims 1-36 under 35 U.S.C. 121, as allegedly being drawn to six patentable distinct inventions, is respectfully traversed. It is respectfully submitted that the

In re Application of: Schiffer & Heinemann  
Application No.: 09/854,140  
Filing Date: May 11, 2001  
Page 2 of 7

PATENT  
Attorney Docket No.: SALK2940  
(088802-8051)

claims have been split into too many groups. These claims could readily be regrouped into a smaller number of groups, without adding to the burden on the Examiner.

Specifically, Applicants respectfully submit that the claims of Group I (claims 1-13, drawn to a method of detecting the genotype of the kainate receptor subunit GluR7 allele), could readily be combined for examination with Group II (claims 14, 15 and 17-19, drawn to a kit comprising an oligonucleotide specific for detecting a kainate receptor subunit GluR7 allele) and Group III (claims 14, 16, 20 and 21, drawn to a kit comprising an antibody specific for a kainate receptor subunit GluR7). Since Groups I - III are all related to detecting kainate receptor subunit GluR7 allele, a prior art search of one group would, of necessity, involve a search of the other groups.

Alternatively, Group IV (claims 22-28, drawn to a method of treating a subject by administering a compound that alters GluR7 receptor subunit activity or function) could readily be combined with Group V (claims 29-31, drawn to a method of identifying a compound that alters GluR7 receptor subunit activity) for examination. Compounds identified by the methods of Group V are suitable for use in the treatment methods of Group IV. A prior art search of one group would necessarily involve a search of the other group.

Group VI (claims 32-36, drawn to a transgenic non-human animal having a knockout of endogenous GluR7 and an insertion of human GluR7) is interrelated to the other groups, for example, as a useful vehicle for the method of identification (Group V), as a model system for the methods of treatment (Group IV), and the like.

Since all of the claims are intimately interrelated, there is no serious burden placed upon the Examiner by examination of all pending claims in a single application. No conservation of PTO resources would be realized if the restriction requirement into six Groups is maintained. Accordingly, reconsideration and withdrawal of the restriction requirement are respectfully requested. Alternatively, regrouping of the claims into fewer groups as suggested above is respectfully requested.

In re Application of: Schiffer & Heinemann  
Application No.: 09/854,140  
Filing Date: May 11, 2001  
Page 3 of 7

PATENT  
Attorney Docket No.: SALK2940  
(088802-8051)

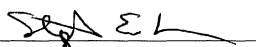
However, in order to be fully responsive, Applicants hereby elect Group I, claims 1-13, for examination, with traverse. Non-elected claims 14-36 are retained in the application in view of Applicants' belief that restriction as asserted is improper.

### CONCLUSION

In view of the foregoing remarks, prompt and favorable action on all claims is respectfully requested. Should any matters remain outstanding, the Examiner is encouraged to contact the undersigned at the telephone number listed below so that a prompt disposition of this application can be achieved.

Respectfully submitted,

Date: 9/3/02

  
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